

CALIFORNIA CHILDBEARING WOMEN: A COMPARISON OF HIV SEROPREVALENCE DATA FROM THE THIRD QUARTERS OF 1992, 1995, AND 1998 AND ZIDOVUDINE DETERMINATION, 1998



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Gray Davis
Governor
State of California

Grantland Johnson
Secretary
Health and Human Services Agency

Diana M. Bontá, R.N., Dr. P.H.
Director
Department of Health Services

DEPARTMENT OF HEALTH SERVICES

714/744 P STREET
P.O. BOX 942732
SACRAMENTO, CA 94234-7320
(916) 323-7415



TO: INTERESTED PARTIES

SUBJECT: CALIFORNIA CHILDBEARING WOMEN: A COMPARISON OF HIV SEROPREVALENCE DATA FROM THE THIRD QUARTERS OF 1992, 1995, AND 1998 AND ZIDOVUDINE DETERMINATION, 1998

I am pleased to make available to you a report on seroprevalence of human immunodeficiency virus (HIV) and zidovudine determination among California's childbearing women. The data in this report were gathered in July, August, and September of 1992, 1995, and 1998.

The California Department of Health Services, Office of AIDS (OA), in collaboration with the Genetic Disease Branch (GDB), and the Viral and Rickettsial Disease Laboratory (VRDL), participated in this national serosurvey from 1988 through 1995. In 1998, OA, in collaboration with GDB and VRDL, replicated the serosurvey. In addition, the Newborn Screening Quality Assurance Program at the Centers for Disease Control and Prevention measured zidovudine in HIV antibody-positive specimens to assess the prevalence of zidovudine therapy among California HIV-infected childbearing women.

I hope the data gathered from this population-based serosurvey becomes an important resource for planning HIV prevention activities, developing care and treatment programs, and for designing resource allocations. The zidovudine determination data can be very important for the assessment of zidovudine therapy among HIV-positive pregnant women and their newborns.

If you have any questions about this report, please contact Juan D. Ruiz, M.D., M.P.H., Dr. P.H., at (916) 445-0700.

Vanessa Baird
Vanessa Baird, M.P.P.A.
Acting Chief
Office of AIDS

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Prepared by
Juan Ruiz, M.D., Dr. P.H.
Donna Zukowski

Office of AIDS
HIV/AIDS Epidemiology Branch
<http://www.dhs.ca.gov/AIDS>

January 2001

Kevin Reilly, D.V.M., M.P.V.M.
Acting Deputy Director
Prevention Services

Vanessa Baird, M.P.P.A.
Acting Chief
Office of AIDS

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I. EXECUTIVE SUMMARY

Objectives. The objectives of this project were: 1) to estimate the seroprevalence of human immunodeficiency virus (HIV) among women delivering infants in California, and 2) to assess the prevalence of zidovudine therapy among HIV-infected childbearing women.

Design. The serosurvey consisted of all women giving birth in a hospital, during the three month period of July – September, for each year data were collected. Residual dried-blood specimens for all newborns were collected by heel stick onto filter paper for routine metabolic screening, and tested for HIV antibodies after all personal identifying information had been removed. The Centers for Disease Control and Prevention (CDC) tested all HIV positive specimens and a sample of HIV negative specimens for Zidovudine determination.

Result. During the third quarter of 1998, there were a total of 119,108 serum samples tested, of which 77 (0.06%) were HIV antibody positive. The HIV seroprevalence among Black and Hispanic women represented 72.7% compared to 20.8% among White women. However, the prevalence of *no* Zidovudine therapy among HIV-infected Black and Hispanic childbearing women was 26.8% compared to 12.5% among HIV-infected White women. Almost 60% of all HIV-infected women were in age groups 25-29 and 30-34. However, the prevalence of *no* Zidovudine therapy among HIV-infected women in age groups 25-29 and 30-34 was 28.3%. The highest HIV seroprevalences in childbearing women were reported from the counties of El Dorado, Humboldt, San Francisco, Merced and Butte.

Conclusion. The anonymous seroprevalence survey among California childbearing women from 1988 through 1995 and 1998 has provided a basis for further describing the HIV epidemic among childbearing women. The state plans to use Zidovudine therapy data to target resources in a more cost-beneficial manner and to adjust HIV counseling and testing protocols.

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I. BACKGROUND

Perinatal transmission of human immunodeficiency virus (HIV) accounts for 90% of pediatric acquired immunodeficiency syndrome (AIDS) cases and almost all new HIV infections in children.¹ HIV infection can be passed from an infected pregnant woman to her fetus during pregnancy (in utero) or labor and delivery (intrapartum), and from a mother to her infant through breast-feeding (postpartum). In utero transmission is most likely through transplacental transmission of HIV² or through maternal-fetal transfusion, especially following placental disruption. Intrapartum transmission can occur through maternal-fetal transfusion of blood during labor or contact of infant skin or mucous membranes with the infected blood or other maternal secretions during delivery.³ HIV is commonly contained in the breast milk of HIV-infected women.⁴ Transmission of HIV through breast-feeding is most likely due to the frequent and prolonged exposure of infants' oral and gastrointestinal tracts to breast milk.³

The maternal immunoglobulin G antibody to HIV is passively transferred across the placenta during pregnancy; thus, it is present in the blood of the newborn at approximately the same concentration as in the mother.⁵ Detection of HIV antibody in the blood of the newborn indicates HIV infection of the mother and that the infant is at risk of infection.⁶

From 1988 through 1995, an anonymous national HIV serosurvey – the Survey of Childbearing Women – was conducted to monitor prevalence of HIV infection among women delivering infants in the United States.⁶ The survey was based on the systematic, unlinked testing for HIV antibody with residual dried blood spot specimens routinely collected from newborns for routine metabolic screening.

The data from the national survey were helpful for public health efforts, for example, estimating the number of children born with HIV infection each year. An estimated 6,000 to 7,000 infants were born to HIV-infected women each year from 1989 to 1995, and more than 16,000 perinatally HIV-infected children have been born since the beginning of the epidemic.^{7,8} With a projected perinatal HIV transmission rate of 25% (based on no maternal zidovudine therapy), an estimated 1,500 – 1,750 HIV-infected infants were born each year in the United States. Since 1994, when the results of the Pediatric AIDS Clinical Trial Group 076 zidovudine perinatal trial were announced,⁹ and zidovudine therapy was recommended for pregnant HIV-infected women,¹⁶ the number of new HIV infections in children born to HIV-infected women has been dramatically reduced.

The California Department of Health Services Office of AIDS (OA), in collaboration with the Genetic Disease Branch (GDB) and the Viral and Rickettsial Disease Laboratory (VRDL),

participated in this national serosurvey from 1988 through 1995. OA collected data on consecutive births during the third quarter (July, August, and September). In 1998, OA, in collaboration with GDB and VRDL, replicated the serosurvey. In addition, the Centers for Disease Control and Prevention (CDC) measured zidovudine in HIV antibody-positive specimens to assess the prevalence of zidovudine therapy among HIV-infected childbearing women. These population-based data are important to target resources in a cost-beneficial manner and to enhance HIV counseling and testing strategies among pregnant women.

II. METHODS

A. Survey Design

The target population for the survey of childbearing women in California consists of all women who deliver in a hospital and under medical supervision in a given year. Because the mother's HIV serostatus is assessed using specimens collected from newborns, the sampling frame includes all live births for which a specimen was submitted for routine newborn metabolic screening. Duplicate and repeat specimens from the same infant are excluded from the survey, and only one specimen from multiple births is submitted for HIV testing. The population basis of the survey is complete to the extent that 1) the metabolic screening program obtains specimens from all newborns, and 2) all specimens are of sufficient quantity and quality for HIV antibody testing.¹⁰

In 1998, residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibodies by enzyme immunoassay and Western blot after all personal identifiers had been permanently removed. The Centers for Disease Control and Prevention (CDC) screened all HIV antibody-positive and a sample of HIV antibody-negative specimens for zidovudine.

B. Sampling Considerations

During each testing year, the sample consists of filter paper specimens from approximately 120,000-160,000 live births in the State for the three-month period of July, August, and September. Estimation of annual prevalence assumes that HIV infection in California childbearing women does not vary seasonally and is not increasing or decreasing rapidly.

C. Genetic Disease Screening Program

In California, city and county health departments are not involved in the genetic disease screening program.¹¹ Screening of newborns for genetic diseases is carried out under the direction and supervision of the GDB of the State Department of Health Services. GDB contracts with eight regional laboratories, which receive the blood-impregnated filter paper discs at ambient temperature directly from the hospitals of birth within an average of three days after birth. The regional laboratories perform four screening tests for phenylketonuria, primary congenital hypothyroidism, galactosemia, and hemoglobinopathies.

After metabolic testing at the regional laboratories is conducted, the unused filter paper specimens are frozen, batched and shipped monthly to the central facility maintained by the Genetic Disease Laboratory of the GDB for permanent frozen storage. The filter paper specimens are identified by a form number and an accession number but no demographic data are attached.

D. Demographic Information Collected With Specimens

No new demographic data beyond those already routinely collected for metabolic screening (see below) are collected for the survey. Demographic records, identified by the same form number and accession number as the filter paper specimens, are entered by the eight regional screening laboratories into the GDB computer system and maintained at a separate location.

A computer program creates a new unique identification number that reflects the plate number and specific location of the specimen on the plate (well) in which the specimen is to be punched for HIV testing. GDB produces a series of plate maps showing which samples should be punched into which wells on which plates.

GDB provides a demographic data file to the State Office of AIDS containing the unique identification number as well as the following information for each specimen selected for testing:

1. Month and year of infant's birth
2. County and city of mother's residence
3. County of birth hospital
4. Age of mother
5. Race of mother
6. Hispanic origin of mother
7. Zip code of mother

E. Testing

Using the maps from GDB, VRDL labels one circle from each card with the new unique identification number and removes the labeled circle from the card. These circles, called study samples, are bundled in groups corresponding to one test plate. Once the study samples are removed from the cards, the original cards are returned to GDB for storage and the maps linking the accession numbers to the study samples are returned to GDB and shredded. Study samples are punched into plates according to their identification numbers. Wells corresponding to missing and inadequate samples are left blank.

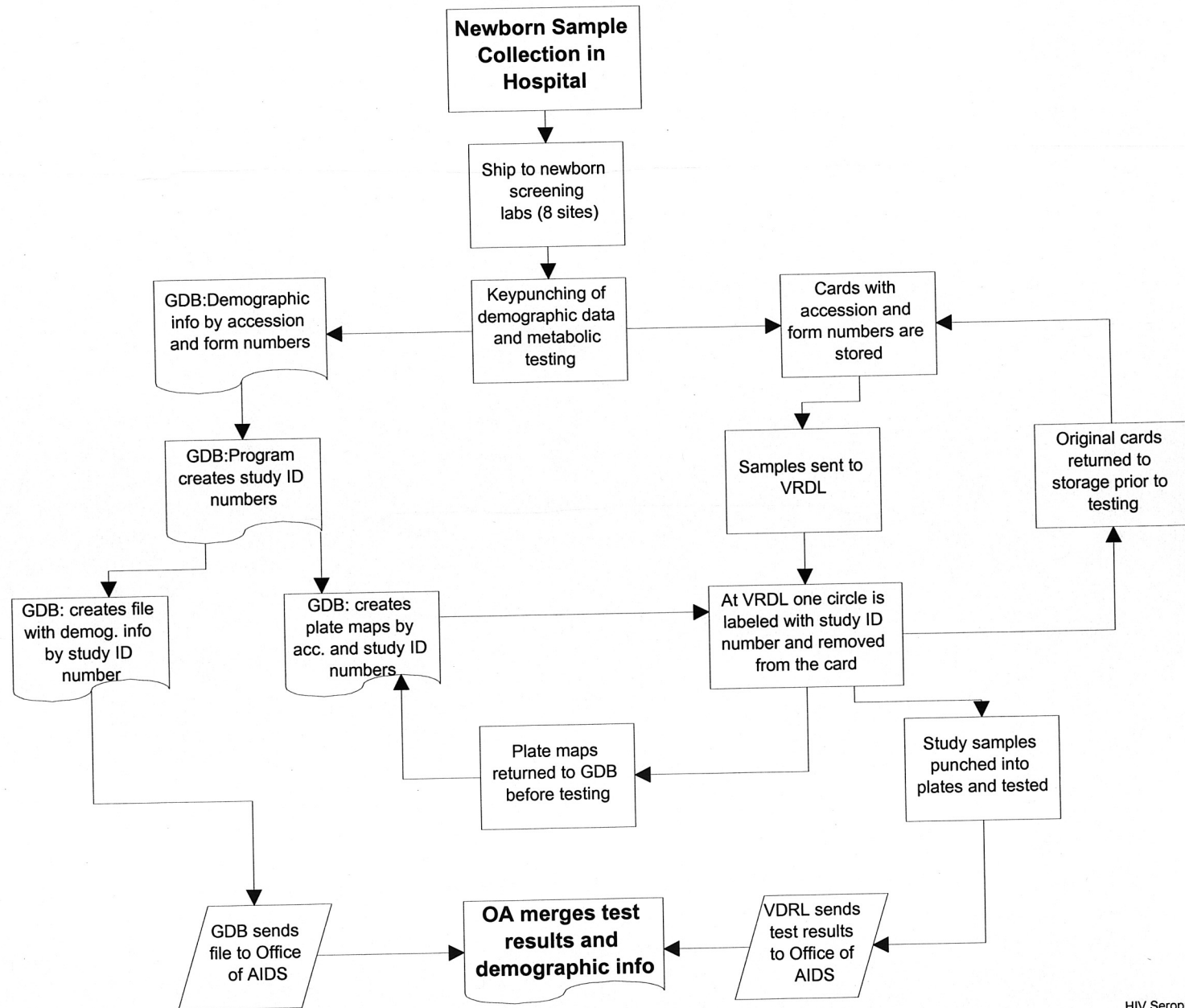
The VRDL performed enzyme-linked immunosorbent assays (EIA) for the presence of HIV antibodies for all 1998 specimens. Repeat and confirmatory testing (mini Western blots) was also performed by the VRDL. Testing was conducted in accordance with the provisions contained in the guidelines distributed by the CDC entitled *Neonatal HIV-1 Laboratory Procedures*, and in the detailed procedures set forth in the protocol distributed by the CDC entitled *Serologic Assays for Human Immunodeficiency Virus Antibody in Dried-Blood Specimens Collected on Filter Paper from Neonates* published by the U.S. Department of Health and Human Services in August of 1989.

The CDC used the modified radioimmunoassay to quantitatively determine zidovudine from dried blood spot specimens (DBS)¹² and to screen for zidovudine in all HIV antibody-positive and a sample of HIV antibody-negative DBS eluates.

F. Merging of the Data Files and Analysis

The Office of AIDS merges the demographic data file from GDB and the test result file from VRDL by unique identification number. SAS version 8.0 was used to produce frequencies and seroprevalences by selected demographic variables.

SCBW Implementation and Operations Management Flowchart



III. RESULTS

As shown in Table 1 and Figure 1, HIV seroprevalences in childbearing women in California ranged from 0.6 per 1,000 from 1989 and 1993 to 0.8 per 1,000 in 1988 and 1991. The trend of HIV infection in California childbearing women remained relatively stable. During the third quarter of 1998, 119,108 specimens were tested. Of these, 77 were HIV antibody positive, or about one in every 1,547 women giving birth in the State at a rate of 0.65 per 1,000. This seroprevalence is the same as that calculated for 1995, but is a decrease from 1994.

Table 2 and Figure 2 summarize race/ethnicity-specific seroprevalences in California from 1992, 1995, and 1998. During the third quarter of each of these years, Hispanic childbearing women accounted for the largest number of births, (70,379, 67,570, and 60,770 respectively). However, race-specific seroprevalences consistently reveal substantially higher HIV seroprevalences among Black women. In 1998, seroprevalences were ten times higher among Black women compared with White women. However, in 1998, the HIV seroprevalence remained stable for White women, increased among Black and other women and decreased among Hispanic women.

Table 2a shows the prevalence of zidovudine therapy among HIV-infected childbearing women by race ethnicity. Overall, the prevalence of zidovudine therapy among HIV-infected childbearing women was 76.6%. In the third quarter of 1998, the HIV seroprevalence among Black and Hispanic women represented 72.7% (56/77) compared to 20.8% (16/77) among White women. However, the prevalence of no zidovudine therapy among HIV-infected Black and Hispanic childbearing women was 26.8% (15/56) compared to 12.5% (2/16) among HIV-infected White women.

Shown in Table 3 and Figure 3 are the age group HIV seroprevalences in California from 1992, 1995, and 1998. In 1998, age-specific HIV seroprevalences were highest and increased among women in age groups 25-29, 30-34, and 35 & Over. Women with "unknown" age group remained at 0.0 per 1,000 (zero/19). The decrease in the number of women with "unknown" age was due to the efforts made by the GDB staff in making sure that demographic data was reported by the birth hospitals.

Table 3a shows the prevalence of zidovudine therapy among HIV-infected childbearing women by age group. Almost 60.0% (46/77) of all HIV-infected pregnant women is among age groups 25-29 and 30-34. However, the prevalence of no zidovudine therapy among HIV infected childbearing women in these age groups was 28.3% (13/46).

Shown in Table 4 are the HIV seroprevalences in childbearing women by county of residence from the years 1992, 1995, and 1998. For 1998, county-specific seroprevalences ranged from 0.0 per 1,000 in 38 counties and selected cities to 2.9 per 1,000 in El Dorado County (Figure 4). In general, HIV seroprevalences were highest among childbearing women

from large metropolitan areas. In Los Angeles county, where a third of all babies were born, an HIV seroprevalence of 0.7 per 1,000 was found in 1992, increasing to 1.0 per 1,000 in 1995, and decreasing to 0.7 per 1,000 in 1998. In terms of the geographic spread of HIV seropositive results, there was at least one positive HIV test result recorded in 23 of California's 58 counties in 1998. The highest HIV seroprevalences in childbearing women were reported in the following counties:

1992		1995		1998	
<i>County</i>	<i>Prevalence per 1,000</i>	<i>County</i>	<i>Prevalence per 1,000</i>	<i>County</i>	<i>Prevalence per 1,000</i>
Madera	3.7	San Francisco	2.8	El Dorado	2.9
Alameda	2.8	Alameda	1.7	Humboldt	2.6
San Francisco	2.0	San Luis Obispo	1.5	San Francisco	2.6
Kings	1.9	Sacramento	1.1	Merced	2.4
Contra Costa	1.2	Los Angeles	1.0	Butte	1.9

Table 4a shows the prevalence of zidovudine therapy among HIV-infected childbearing women by county. Among counties with five or more HIV-positive specimens, 100% of HIV-infected childbearing women from San Diego County showed presence of zidovudine. The prevalence of no zidovudine therapy among HIV-infected childbearing women from Los Angeles, San Bernardino, San Francisco, and other counties with HIV-positive specimens ranged between 20.0% and 26.5%.

Presented in Table 5 and Figures 5 and 6 are 1992, 1995, and 1998 HIV seroprevalences in childbearing women by region, race/ethnicity, and age group of the mother.

Overall, the lowest HIV seroprevalence in 1992 and 1995 were reported in Southern Metropolitan Counties, and the lowest HIV seroprevalence in 1998 was reported in Other Bay Area Counties. San Francisco had the highest HIV seroprevalence in 1992 (2.0 per 1,000), 1995 (2.8 per 1,000), and 1998 (2.6 per 1,000).

During the third quarter of 1998 childbearing women from Los Angeles represented 31.6% (37,588/119,108) of the total childbearing women population in the State and 0.7 per 1,000 (26) were HIV seropositive. In contrast, childbearing women from San Francisco represented 1.6% (1,907/119,108) of the total childbearing women population in the State and 2.6 per 1,000 (5) were HIV seropositive.

In all regions there was a significant decrease in women giving birth between 1995 and 1998. The two factors contributing to the dropping number of births since 1990 are decreasing fertility rates and changing age structure of the population. As a large number of women in the baby boom cohort moved out of the primary childbearing years, a smaller cohort followed.¹³ In the third quarter of 1998, there were 10,222 missing and quantity insufficient specimens.

By regions, the 1998 HIV seroprevalences among Black childbearing women in San Francisco (11.4 per 1,000), Southern Metropolitan Counties (6.0 per 1,000), San Diego (4.1 per 1,000), Other Bay Area Counties (3.4 per 1,000), and Los Angeles (2.8 per 1,000) were higher than the other racial/ethnic groups. In these regions, 44.4% (24/54) of the HIV seropositive women were Black.

Shown in Table 6 and Figures 7 and 8 are HIV seroprevalences for the years 1992, 1995, and 1998 among childbearing women in Urban/Non-urban regions by race/ethnicity and age group of the mother. Childbearing women in urban regions represented 73.9% (111,644) in 1992, 73.0% (99,251) in 1995, and 72.1% (85,879) in 1998 of total births. Childbearing women in Non-urban regions represented 26.1% in 1992, 27% in 1995, and 27.9% in 1998 of total births. In Urban regions, the HIV prevalence rate remained stable (0.8 per 1,000) in 1992 and 1995, and decreased to 0.6 per 1,000 in 1998. In Non-urban regions, the HIV prevalence rate decreased from 0.4 per 1,000 in 1992 to 0.3 per 1,000 in 1995, and increased to 0.8 per 1,000 in 1998.

In 1992, 1995, and 1998, HIV seroprevalence was highest in Black childbearing women in urban regions (4.7 per 1,000 in 1992, 3.1 per 1,000 in 1995, and 3.3 per 1,000 in 1998). Sixty-five percent of all HIV seropositive childbearing women in California resided in urban regions in 1998. In 1998, in Urban regions, 40.0% of the HIV seropositive women were Black compared to 33.3% in Non-urban regions.

In 1998, HIV seroprevalence was highest among childbearing women aged 35 & Over (0.9 per 1,000) in Urban regions and 1.2 per 1,000 among childbearing women in age groups 25-29 and 30-34 in Non-urban regions.

IV. CONCLUSION

The use of anonymous surveys, in which data are not linked to individual subjects, is a means of obtaining the least biased data on the prevalence of HIV infection without violating rights to confidentiality, informed consent, and counseling that apply to individualized testing.¹⁴

Results from the survey conducted from 1988 through 1995 and 1998 indicate that the overall HIV seroprevalence among childbearing women in California has remained relatively stable. Seroprevalence was highest among Black childbearing women in 1992, 1995, and 1998. Continuing this trend, the HIV seroprevalence among Black childbearing women for 1998 was ten times higher compared with White women.

In 1998, there were 521,265 live births in California. The HIV seroprevalence rate among childbearing women during the third quarter of 1998 was 0.06465% (77/119,108). Therefore, an estimated 337 ($521,265 \times 0.06465\%$) HIV-infected women gave birth in California in 1998, and, based on a 25% vertical transmission rate, an estimated 84 ($.25 \times 337$) of their infants were HIV infected.

In 1994, the Pediatric AIDS Clinical Trials Group (PACTG) protocol number 076 showed that the administration of zidovudine to selected HIV-infected pregnant women and their newborns reduced perinatal transmission rates by two thirds: 25.5% of infants born to mothers in the placebo group were HIV-infected, compared with 8.3% of those born to mothers in the zidovudine group.^{9,15} This represents a two-thirds reduction in transmission rate among ZDV recipients. Based on this study, in August 1994, the U.S. Public Health Service recommended zidovudine to reduce perinatal HIV transmission¹⁶ and, in July 1995, routine HIV counseling and voluntary prenatal testing.¹⁷ If 76.6% ($n=258$) of the estimated 337 HIV-infected women and their newborns received zidovudine therapy, and assuming a vertical transmission rate of 8.3%, we estimate that approximately 21 ($.083 \times 258$) infants would have been infected with HIV. For the remaining 79 ($337-258$) HIV-infected women and their newborns who did not receive zidovudine therapy, and assuming a vertical transmission rate of 25.5%, we estimate that approximately 20 ($.255 \times 79$) infants would have been infected with HIV. Therefore, an estimated 41 infants born in California in 1998 were infected with HIV.

Data from clinical trials and observational studies have demonstrated that zidovudine is effective in reducing perinatal HIV transmission and AIDS.¹⁵ Zidovudine's effectiveness includes women with advanced HIV disease, women treated with short-course prenatal zidovudine, and women with low CD4 cell counts and previous zidovudine therapy.¹⁸⁻²⁴ The increase in zidovudine use to reduce perinatal HIV transmission is associated with declines in incidence of pediatric AIDS cases.²⁵

Statewide, the population-based Survey of Childbearing Women, together with AIDS surveillance data, has provided a basis for further describing the dynamics of the HIV epidemic among women of reproductive age. In California, data gathered from this

population-based serosurvey have become an important resource for planning HIV prevention activities, developing care and treatment programs, and for designing resource allocations.

In 1998, CDC used the zidovudine dried blood spot specimen assay to provide the State and local health departments with important data for the assessment of zidovudine therapy among HIV-positive pregnant women and their newborns. The State plans to use these data to target resources in a more cost-beneficial manner and to adjust HIV counseling and testing protocols.

The most critical needs for lowering perinatal transmission of HIV include the identification of childbearing women who do not receive HIV testing or prophylaxis, and the development of community-based interventions and outreach programs that are effective among women. Every pregnant woman needs to know her HIV infection status so that she can actively participate in prevention strategies that include zidovudine therapy and avoidance of breastfeeding to decrease the chances of her child being infected with HIV. The Office of AIDS, in collaboration with the CDC, Stanford University School of Medicine, and five local health departments, is conducting a five-year prevention project to reduce perinatal transmission of HIV. The project will allow sites to: 1) conduct a needs assessment of HIV counseling and voluntary prenatal testing among childbearing women and prenatal care providers; 2) develop community-based interventions to increase voluntary HIV prenatal testing; and 3) provide prenatal care providers with technical assistance in implementing an HIV education, counseling, and testing program.

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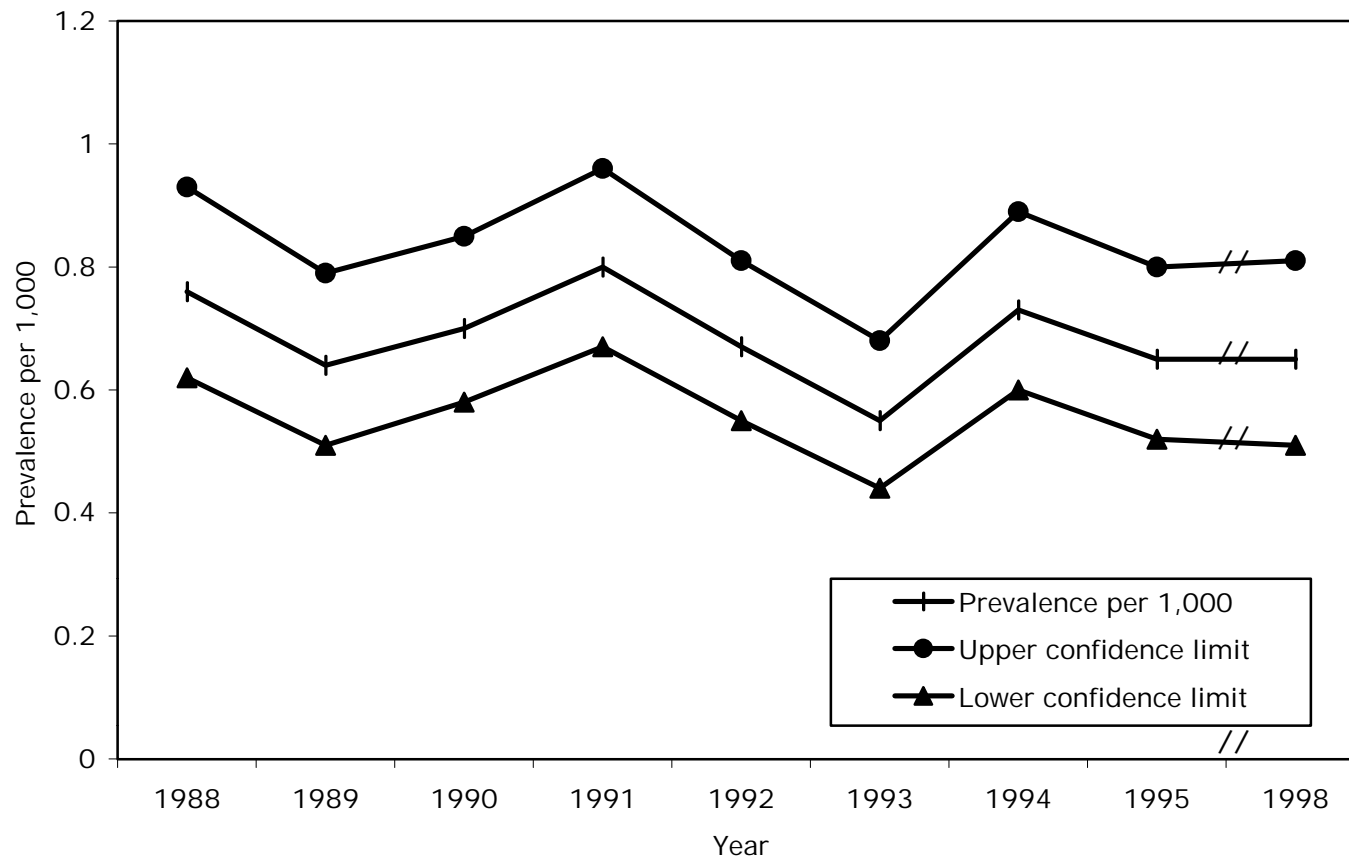
**TABLE 1. HIV SEROPREVALENCE
IN CALIFORNIA CHILDBEARING WOMEN¹
1988 – 1995, 1998**

Survey Year	Specimens Tested	Number HIV+ ²	Prevalence Per 1000	95% Confidence Intervals
1988	131,311	100	0.76	(0.62 – 0.93)
1989	139,569	89	0.64	(0.51 – 0.79)
1990	150,494	106	0.70	(0.58 – 0.85)
1991	154,918	124	0.80	(0.67 – 0.96)
1992	151,033	101	0.67	(0.55 – 0.81)
1993	150,598	83	0.55	(0.44 – 0.68)
1994	143,095	105	0.73	(0.60 – 0.89)
1995	135,991	88	0.65	(0.52 – 0.80)
1998	119,108	77	0.65	(0.51 – 0.81)

¹ Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

² All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

**FIGURE 1. HIV SEROPREVALENCES IN CALIFORNIA
CHILDBEARING WOMEN
1988 - 1995, 1998**



Note: Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

**TABLE 2. HIV SEROPREVALENCE
IN CALIFORNIA CHILDBEARING WOMEN¹
BY RACE/ETHNICITY
1992 – 1995 – 1998**

Race/Ethnicity	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000/ 95% C.I.	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000/ 95% C.I.	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000/ 95% C.I.
White	53,533	18	0.3 (0.20-0.53)	44,435	17	0.4 (0.22-0.61)	36,992	16	0.4 (0.25-0.70)
Black	10,610	47	4.4 (3.26-5.89)	8,778	25	2.8 (1.84-4.20)	7,533	29	3.8 (2.58-5.53)
Hispanic	70,379	30	0.4 (0.29-0.61)	67,570	44	0.7 (0.47-0.87)	60,770	27	0.4 (0.29-0.65)
Asian	9,697	1	0.1 (0.00-0.57)	9,316	0	0.0	7,781	0	0.00
Other ³	5,712	3	0.5 (0.11-1.53)	5,845	2	0.3 (0.00-1.24)	5,957	5	0.8 (0.27-1.96)
Unknown	1,102	2	1.8 (0.22-6.54)	47	0	a	75	0	a
Total	151,033	101	0.7	135,991	88	0.6	119,108	77	0.6

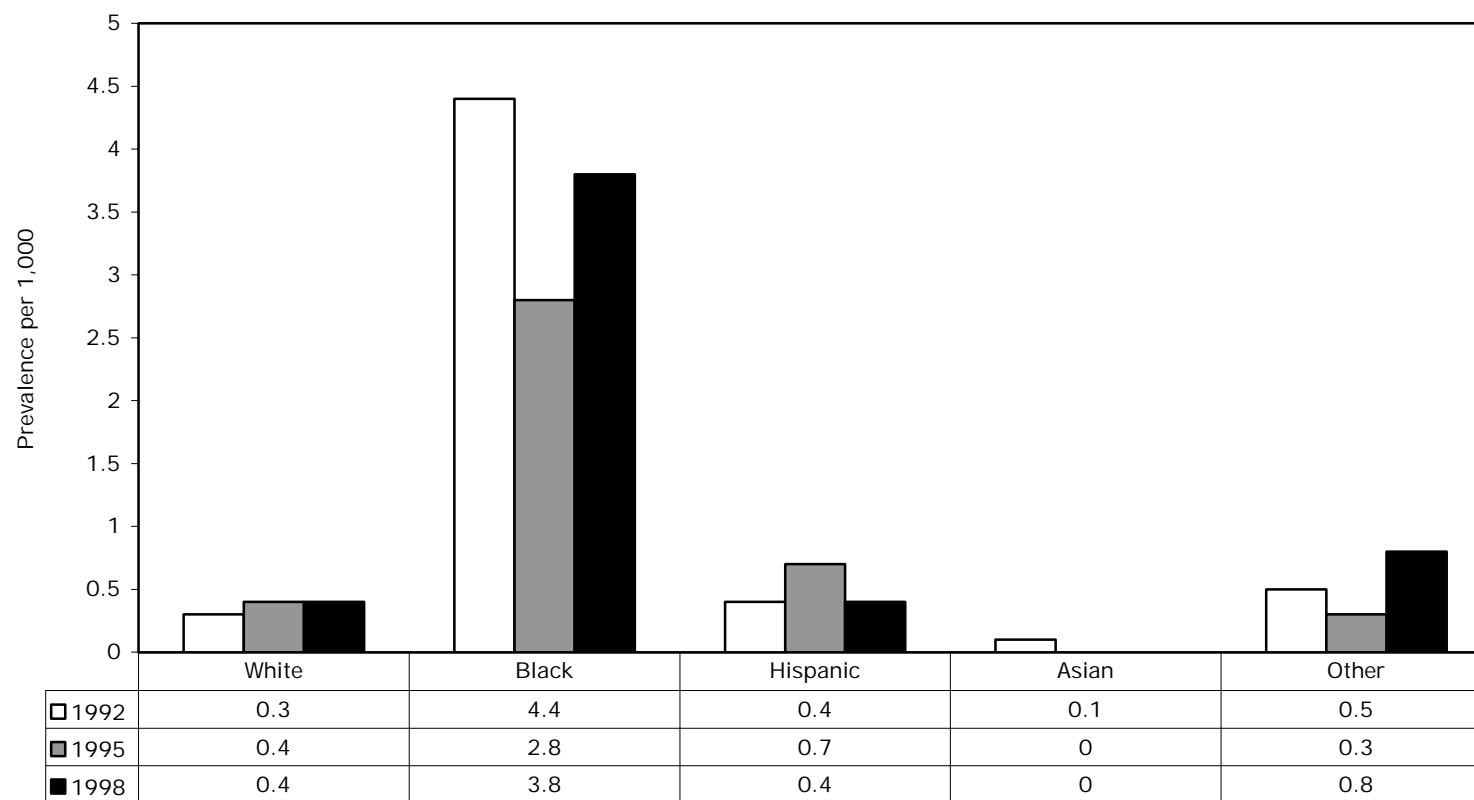
¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

³Includes Native Americans, Pacific Islanders and mixed races.

^aNot calculated for fewer than 100 tested.

**FIGURE 2. HIV SEROPREVALENCE IN CALIFORNIA
CHILDBEARING WOMEN, BY RACE/ETHNICITY
1992, 1995, 1998**



Note: Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

**TABLE 2a. PREVALENCE OF ZIDOVUDINE THERAPY
AMONG HIV-INFECTED CHILDBEARING WOMEN¹
BY RACE/ETHNICITY, 1998**

Race/Ethnicity	1998 Number HIV+ ²	PRESENCE OF ZIDOVUDINE			
		Yes		No	
		n	Percent (%)	n	Percent (%)
White	16	14	87.5	2	12.5
Black	29	22	75.9	7	24.1
Hispanic	27	19	70.4	8	29.6
Asian	0	0	0.0	0	0.0
Other ³	5	4	80.0	1	20.0
Total	77	59	76.6	18	23.4

¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

³Includes Native Americans, Pacific Islanders and mixed races.

**TABLE 3. HIV SEROPREVALENCE
IN CALIFORNIA CHILDBEARING WOMEN¹
BY AGE GROUP
1992 – 1995 – 1998**

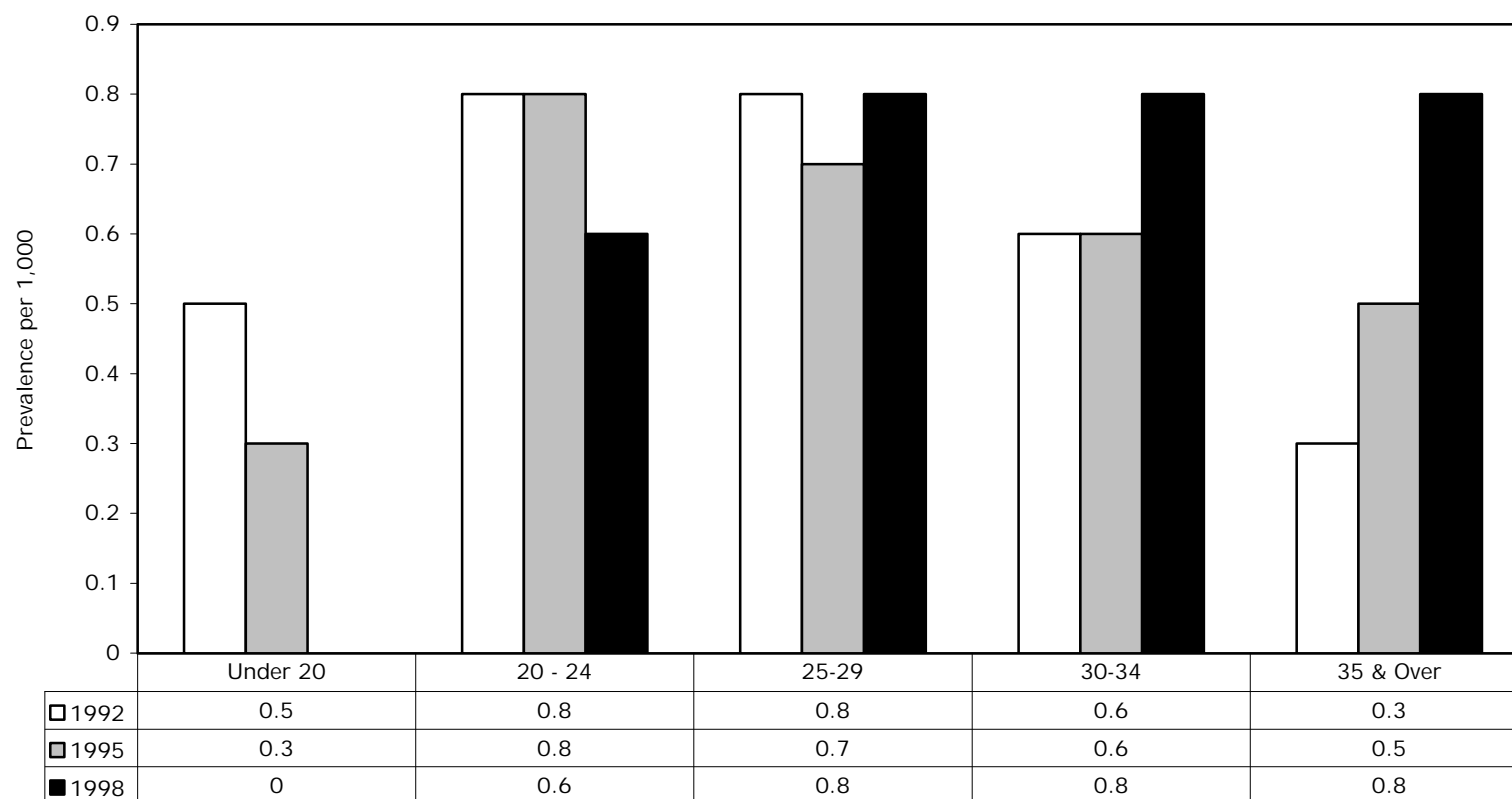
Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000/ 95% C.I.	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000/ 95% C.I.	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000/ 95% C.I.
Under 20	17,728	9	0.5 (0.23-0.96)	17,044	5	0.3 (0.00-0.68)	13,753	0	0.0
20-24	38,180	30	0.8 (0.53-1.12)	32,566	27	0.8 (0.55-1.21)	27,896	16	0.6 (0.33-0.93)
25-29	42,510	32	0.8 (0.52-1.06)	36,353	26	0.7 (0.47-1.05)	32,037	25	0.8 (0.51-1.15)
30-34	32,866	20	0.6 (0.37-0.94)	31,617	20	0.6 (0.39-0.98)	27,502	21	0.8 (0.47-1.17)
35 & Over	17,550	6	0.3 (0.13-0.74)	18,355	10	0.5 (0.26-1.00)	17,901	15	0.8 (0.47-1.38)
Unknown	2,199	4	1.8 (0.50-4.65)	56	0	a	19	0	a
Total	151,033	101	0.7	135,991	88	0.6	119,108	77	0.6

¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

^aNot calculated for fewer than 100 tested.

**FIGURE 3. HIV SEROPREVALENCE IN CALIFORNIA
CHILDBEARING WOMEN, BY AGE GROUP
1992, 1995, 1998**



Note: Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

**TABLE 3a. PREVALENCE OF ZIDOVUDINE THERAPY
AMONG HIV-INFECTED CHILDBEARING WOMEN¹
BY AGE GROUP, 1998**

Age Group	1998 Number HIV+ ²	PRESENCE OF ZIDOVUDINE			
		Yes		No	
		n	Percent (%)	n	Percent (%)
Under 20	0	0	0.0	0	0.0
20-24	16	13	81.3	3	18.8
25-29	25	19	76.0	6	24.0
30-34	21	14	66.7	7	33.3
35 & Over	15	13	86.7	2	13.3
Total	77	59	76.6	18	23.4

¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

**TABLE 4. HIV SEROPREVALENCE
IN CALIFORNIA CHILDBEARING WOMEN¹
BY COUNTY OF RESIDENCE
1992 – 1995 – 1998**

County of Residence	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Alameda	5,626	16	2.8	5,304	9	1.7	4,845	3	0.6
Berkeley ³	NA	NA	NA	281	0	0.0	296	0	0.0
Alpine	4	0	a	4	0	a	7	0	a
Amador	77	0	a	59	0	a	65	0	a
Butte	612	0	0.0	655	0	0.0	540	1	1.9
Calaveras	92	0	a	99	0	a	69	0	a
Colusa	86	0	a	93	0	a	83	0	a
Contra Costa	3,258	4	1.2	3,116	1	0.3	2,862	2	0.7
Del Norte	90	0	a	79	0	a	83	0	a
El Dorado	420	0	0.0	397	0	0.0	341	1	2.9
Fresno	4,181	4	1.0	3,810	3	0.8	3,340	3	0.9
Glenn	128	0	0.0	123	0	0.0	91	1	a
Humboldt	422	0	0.0	393	0	0.0	382	1	2.6
Imperial	851	0	0.0	798	0	0.0	681	1	1.5
Inyo	62	0	a	62	0	a	38	0	a
Kern	3,407	0	0.0	3,117	2	0.6	2,897	4	1.4

TABLE 4. (Continued)

County of Residence	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence Per 1,000
Kings	522	1	1.9	512	0	0.0	467	0	0.0
Lake	162	0	0.0	193	0	0.0	134	0	0.0
Lassen	79	0	a	69	0	a	60	0	a
Los Angeles	50,561	35	0.7	41,989	40	1.0	37,588	26	0.7
Long Beach ³	NA	NA	NA	2,648	5	1.9	2,415	3	1.2
Pasadena ³	NA	NA	NA	615	0	0.0	527	0	0.0
Madera	545	2	3.7	561	0	0.0	555	0	0.0
Marin	693	0	0.0	675	0	0.0	618	0	0.0
Mariposa	49	0	a	40	0	a	39	0	a
Mendocino	282	0	0.0	289	0	0.0	240	0	0.0
Merced	1,078	0	0.0	1,061	0	0.0	846	2	2.4
Modoc	30	0	a	27	0	a	18	0	a
Mono	32	0	a	34	0	a	37	0	a
Monterey	1,847	0	0.0	1,689	0	0.0	1,561	1	0.6
Napa	382	0	0.0	373	0	0.0	338	0	0.0
Nevada	233	0	0.0	226	0	0.0	193	0	0.0
Orange	13,072	4	0.3	12,778	3	0.2	8,443	1	0.1

TABLE 4. (Continued)

County of Residence	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence Per 1,000
Placer	665	0	0.0	667	0	0.0	555	0	0.0
Plumas	48	0	a	112	0	0.0	103	0	0.0
Riverside	6,389	2	0.3	6,246	2	0.3	5,648	3	0.5
Sacramento	4,826	2	0.4	4,626	5	1.1	3,904	4	1.0
San Benito	170	0	0.0	202	0	0.0	240	0	0.0
San Bernardino	8,112	2	0.2	7,582	5	0.7	6,588	7	1.1
San Diego	12,068	11	0.9	10,629	6	0.6	8,909	5	0.6
San Francisco	2,442	5	2.0	2,174	6	2.8	1,907	5	2.6
San Joaquin	2,345	2	0.9	2,263	0	0.0	2,180	3	1.4
San Luis Obispo	715	0	0.0	648	1	1.5	562	0	0.0
San Mateo	2,541	2	0.8	2,533	0	0.0	2,333	1	0.4
Santa Barbara	1,606	0	0.0	1,123	0	0.0	1,361	0	0.0
Santa Clara	7,005	4	0.6	6,716	3	0.4	6,142	0	0.0
Santa Cruz	1,005	1	1.0	908	0	0.0	815	0	0.0
Shasta	563	0	0.0	528	0	0.0	441	0	0.0

TABLE 4. (Continued)

County of Residence	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Sierra	6	0	a	3	0	a	3	0	a
Siskiyou	85	0	a	91	0	a	84	0	a
Solano	1,376	1	0.7	1,284	0	0.0	1,247	1	0.8
Sonoma	1,502	0	0.0	1,368	0	0.0	1,304	0	0.0
Stanislaus	1,909	2	1.0	1,836	1	0.5	1,604	0	0.0
Sutter	315	0	0.0	299	0	0.0	282	0	0.0
Tehama	162	0	0.0	170	0	0.0	154	0	0.0
Trinity	41	0	a	32	0	a	25	0	a
Tulare	2,062	0	0.0	1,859	0	0.0	1,773	0	0.0
Tuolumne	128	0	0.0	142	0	0.0	100	0	0.0
Ventura	3,163	1	0.3	2,465	1	0.4	2,680	0	0.0
Yolo	602	0	0.0	553	0	0.0	498	1	2.0
Yuba	299	0	0.0	304	0	0.0	205	0	0.0
Total ⁴	151,033	101	0.7	135,991	88	0.6	119,108	77	0.6

NA Not available.

¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

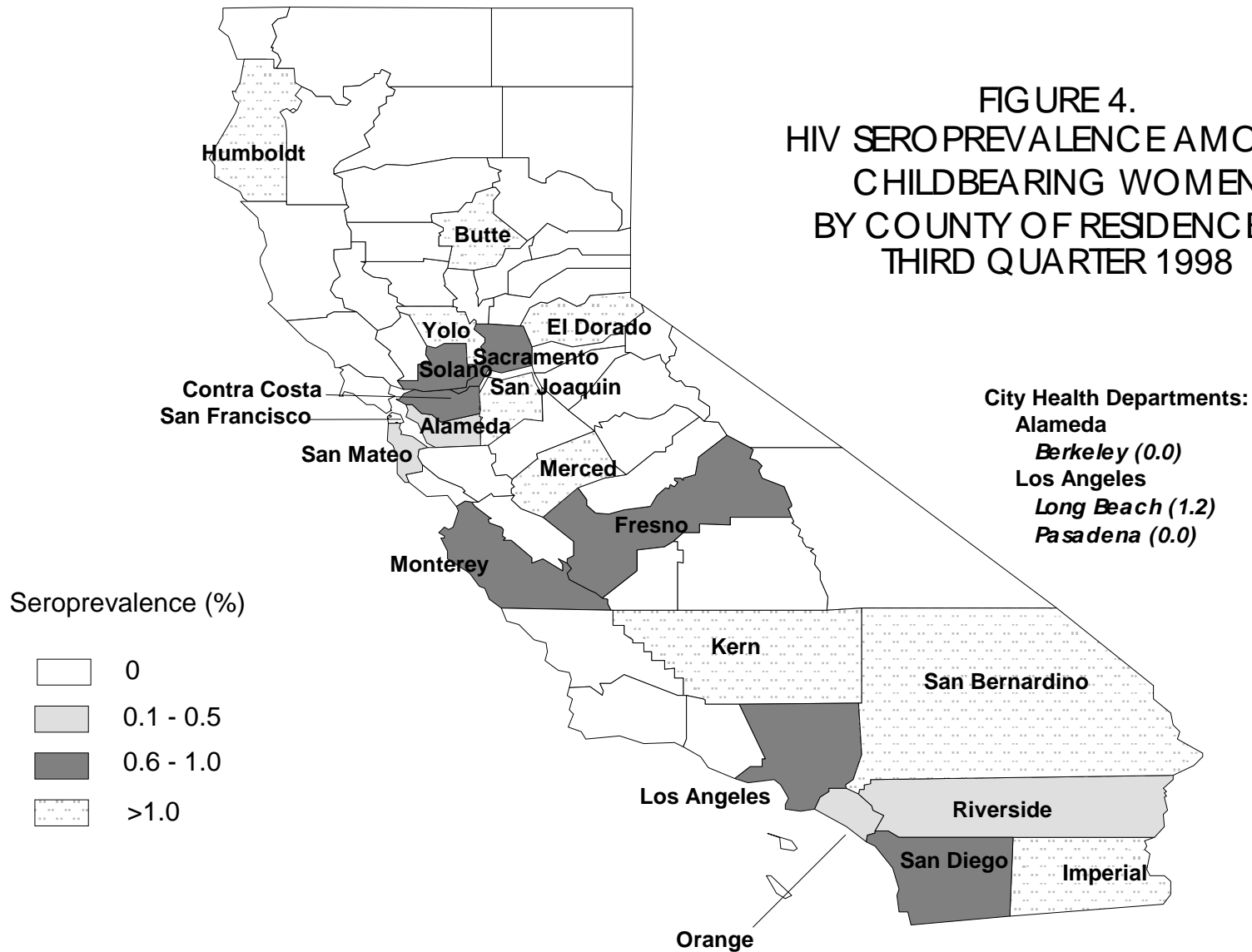
²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

³Berkeley, Long Beach and Pasadena are city health departments. City numbers are included in their respective county totals.

⁴Numbers may not add up to total as there were three cases with unknown county in 1995.

^a Not calculated for fewer than 100 tested.

FIGURE 4.
HIV SEROPREVALENCE AMONG
CHILDBEARING WOMEN
BY COUNTY OF RESIDENCE
THIRD QUARTER 1998



**TABLE 4a. PREVALENCE OF ZIDOVUDINE THERAPY
AMONG HIV-INFECTED CHILDBEARING WOMEN¹
BY COUNTY, 1998**

County of Residence	1998 Number HIV+ ²	PRESENCE OF ZIDOVUDINE			
		Yes		No	
		n	Percent (%)	n	Percent (%)
Los Angeles	26	20	76.9	6	23.1
San Bernardino	7	5	71.4	2	25.6
San Diego	5	5	100.0	0	0.0
San Francisco	5	4	80.0	1	20.0
Other ³	34	25	73.5	9	26.5
Total	77	59	76.6	18	23.4

¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

³Other includes all counties with number HIV+ between 1 and 5, excluding 0 (x/y=Presence of Zidovudine/No Presence of Zidovudine): Alameda (2/1), Butte (1/0), Contra Costa (1/1), El Dorado (0/1), Fresno (3/0), Glenn (1/0), Humboldt (1/0), Imperial (1/0), Kern (3/1), Long Beach City (2/1), Merced (1/1), Monterey (0/1), Orange (1/0), Riverside (2/1), Sacramento (2/2), San Joaquin (3/0), San Mateo (1/0), Solano (1/0), Yolo (1/0).

**TABLE 5. HIV SEROPREVALENCE
IN CALIFORNIA CHILDBEARING WOMEN¹
BY REGIONS, RACE/ETHNICITY AND AGE GROUP
1992 – 1995 – 1998**

Region	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Los Angeles County	White	10,484	8	0.8	7,542	5	0.7	6,715	8	1.2
	Black	4,697	11	2.3	3,688	10	2.7	3,172	9	2.8
	Hispanic	30,590	14	0.5	26,820	24	0.9	23,937	9	0.4
	Asian	2,952	1	0.3	2,653	0	0.0	2,486	0	0.0
	Other	1,545	1	0.6	1,283	1	0.8	1,276	0	0.0
	Unknown	293	0	0.0	3	0	a	2	0	a
	Under 20	6,158	3	0.5	5,365	2	0.4	4,243	0	0.0
	20-24	13,019	11	0.8	10,331	12	1.2	8,980	4	0.4
	25-29	14,132	10	0.7	11,395	13	1.1	10,192	7	0.7
	30-34	10,589	6	0.6	9,313	8	0.9	8,534	7	0.8
	35 & Over	5,958	4	0.7	5,577	5	0.9	5,632	8	1.4
	Unknown	705	1	1.4	8	0	a	7	0	a
	Total	50,561	35	0.7	41,989	40	1.0	37,588	26	0.7

TABLE 5. (Continued)

Region	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
San Francisco County	White	646	0	0.0	587	2	3.4	548	2	3.6
	Black	312	5	16.0	222	2	9.0	176	2	11.4
	Hispanic	610	0	0.0	598	2	3.3	489	1	2.0
	Asian	662	0	0.0	602	0	0.0	508	0	0.0
	Other	135	0	0.0	165	0	0.0	186	0	0.0
	Unknown	77	0	a	0	0	a	0	0	a
	Under 20	165	0	0.0	181	0	0.0	124	0	0.0
	20-24	428	0	0.0	349	1	2.9	299	2	6.7
	25-29	639	2	3.1	532	1	1.9	419	1	2.4
	30-34	628	2	3.2	658	3	4.6	617	1	1.6
	35 & Over	446	1	2.2	454	1	2.2	448	1	2.2
	Unknown	136	0	0.0	0	0	a	0	0	a
	Total	2,442	5	2.0	2,174	6	2.8	1,907	5	2.6

TABLE 5. (Continued)

Region	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Other Bay Area Counties ³	White	8,258	2	0.2	8,802	2	0.2	7,718	1	0.1
	Black	1,741	14	8.0	1,750	5	2.9	1,473	5	3.4
	Hispanic	5,598	4	0.7	6,746	6	0.9	6,278	0	0.0
	Asian	2,168	0	0.0	2,504	0	0.0	2,312	0	0.0
	Other	1,137	1	0.9	1,549	0	0.0	1,837	1	0.5
	Unknown	223	2	9.0	18	0	a	71	0	a
	Under 20	1,701	3	1.8	1,950	0	0.0	1,569	0	0.0
	20-24	3,786	8	2.1	4,136	5	1.2	3,558	0	0.0
	25-29	5,402	7	1.3	5,511	4	0.7	5,264	3	0.6
	30-34	5,029	2	0.4	6,032	3	0.5	5,444	3	0.6
	35 & Over	2,808	0	0.0	3,734	1	0.3	3,845	1	0.3
	Unknown	399	3	7.5	6	0	a	9	0	a
	Total	19,125	23	1.2	21,369	13	0.6	19,689	7	0.4

TABLE 5. (Continued)

Region	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
San Diego County	White	8,258	2	0.2	4,044	2	0.5	3,188	0	0.0
	Black	1,741	14	8.0	615	1	1.6	489	2	4.1
	Hispanic	5,598	4	0.7	4,861	3	0.6	4,247	2	0.5
	Asian	2,168	0	0.0	610	0	0.0	491	0	0.0
	Other	1,137	1	0.9	499	0	0.0	494	1	2.0
	Unknown	223	2	9.0	0	0	a	0	0	a
	Under 20	1,701	3	1.8	1,143	0	0.0	906	0	0.0
	20-24	3,786	8	2.1	2,534	2	0.8	1,917	2	1.0
	25-29	5,402	7	1.3	2,912	1	0.3	2,466	0	0.0
	30-34	5,029	2	0.4	2,568	2	0.8	2,128	1	0.5
	35 & Over	2,808	0	0.0	1,471	1	0.7	1,491	2	1.3
	Unknown	399	3	7.5	1	0	a	1	0	0.0
	Total	19,125	23	1.2	10,629	6	0.6	8,909	5	0.6

TABLE 5. (Continued)

Region	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Southern Metropolitan Counties ⁴	White	11,110	3	0.3	9,381	5	0.5	6,831	1	0.1
	Black	1,295	2	1.5	1,176	1	0.9	1,001	6	6.0
	Hispanic	12,836	2	0.2	13,737	4	0.3	11,251	4	0.4
	Asian	1,284	0	0.0	1,283	0	0.0	781	0	0.0
	Other	970	1	1.0	1,022	0	0.0	813	0	0.0
	Unknown	78	0	a	7	0	a	2	0	a
	Under 20	3,160	0	0.0	3,273	1	0.3	2,483	0	0.0
	20-24	7,267	2	0.3	6,485	3	0.5	5,062	2	0.4
	25-29	8,107	1	0.1	7,422	4	0.5	5,684	5	0.9
	30-34	5,980	5	0.8	6,165	2	0.3	4,702	3	0.6
	35 & Over	2,790	0	0.0	3,237	0	0.0	2,748	1	0.4
	Unknown	269	0	0.0	24	0	a	0	0	a
	Total	27,573	8	0.3	26,606	10	0.4	20,679	11	0.5

TABLE 5. (Continued)

Region	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Rest of California	White	18,040	3	0.2	14,079	1	0.1	11,992	4	0.3
	Black	1,786	11	6.2	1,327	6	4.5	1,222	5	0.4
	Hispanic	15,667	5	0.3	14,808	5	0.3	14,568	11	0.8
	Asian	2,037	0	0.0	1,664	0	0.0	1,203	0	0.0
	Other	1,427	0	0.0	1,327	1	0.8	1,351	3	2.2
	Unknown	307	0	0.0	19	0	a	0	0	a
	Under 20	5,274	3	0.6	5,132	2	0.4	4,428	0	0.0
	20-24	10,569	3	0.3	8,731	4	0.5	8,080	6	0.7
	25-29	10,737	10	0.9	8,581	3	0.3	8,012	9	1.1
	30-34	7,973	3	0.4	6,881	2	0.3	6,077	6	1.0
	35 & Over	4,159	0	0.0	3,882	2	0.5	3,737	2	0.5
	Unknown	552	0	0.0	17	0	a	2	0	a
	Total	39,264	19	0.5	33,224	13	0.4	30,336	23	0.8

¹ Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

² All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

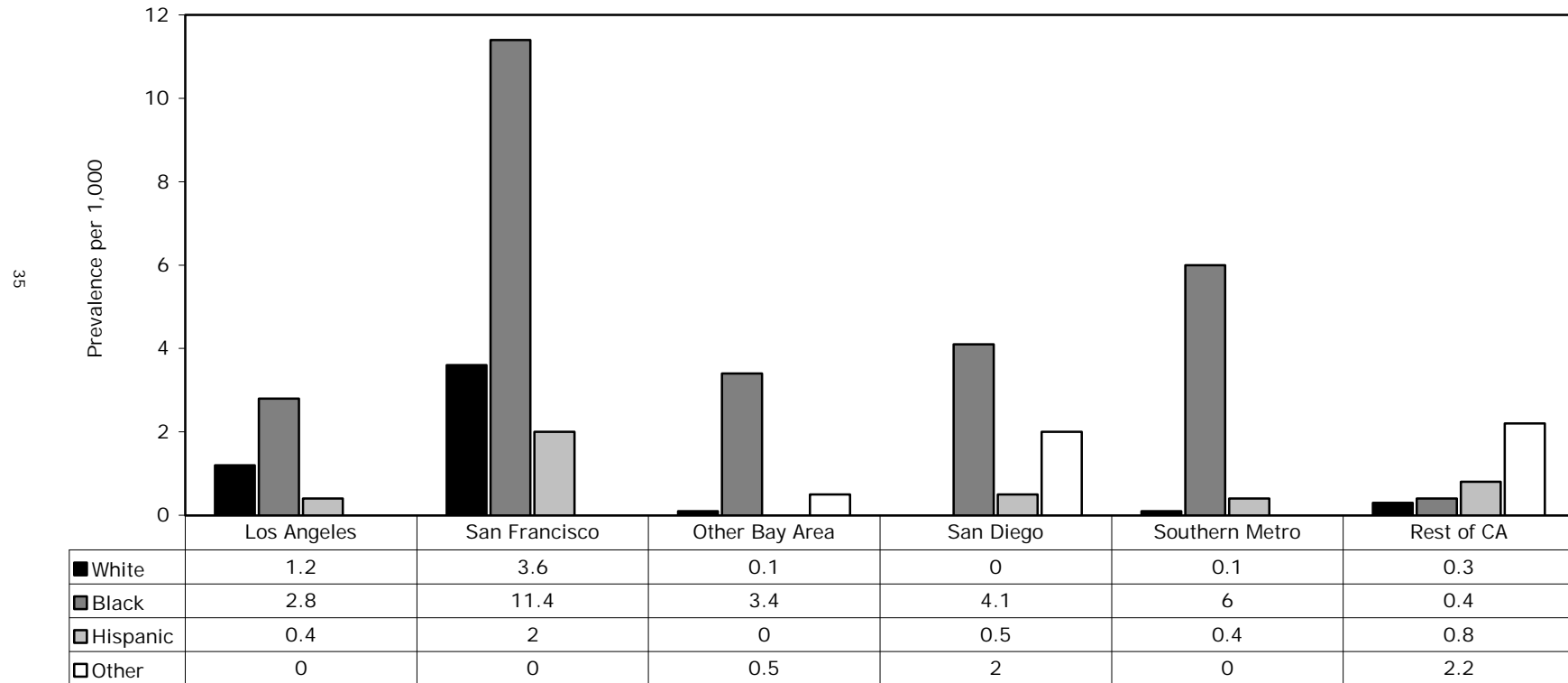
³ Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, Solano, and Sonoma counties.

⁴ Orange, Riverside, and San Bernardino counties.

⁵ Includes Native Americans, Pacific Islanders and mixed races.

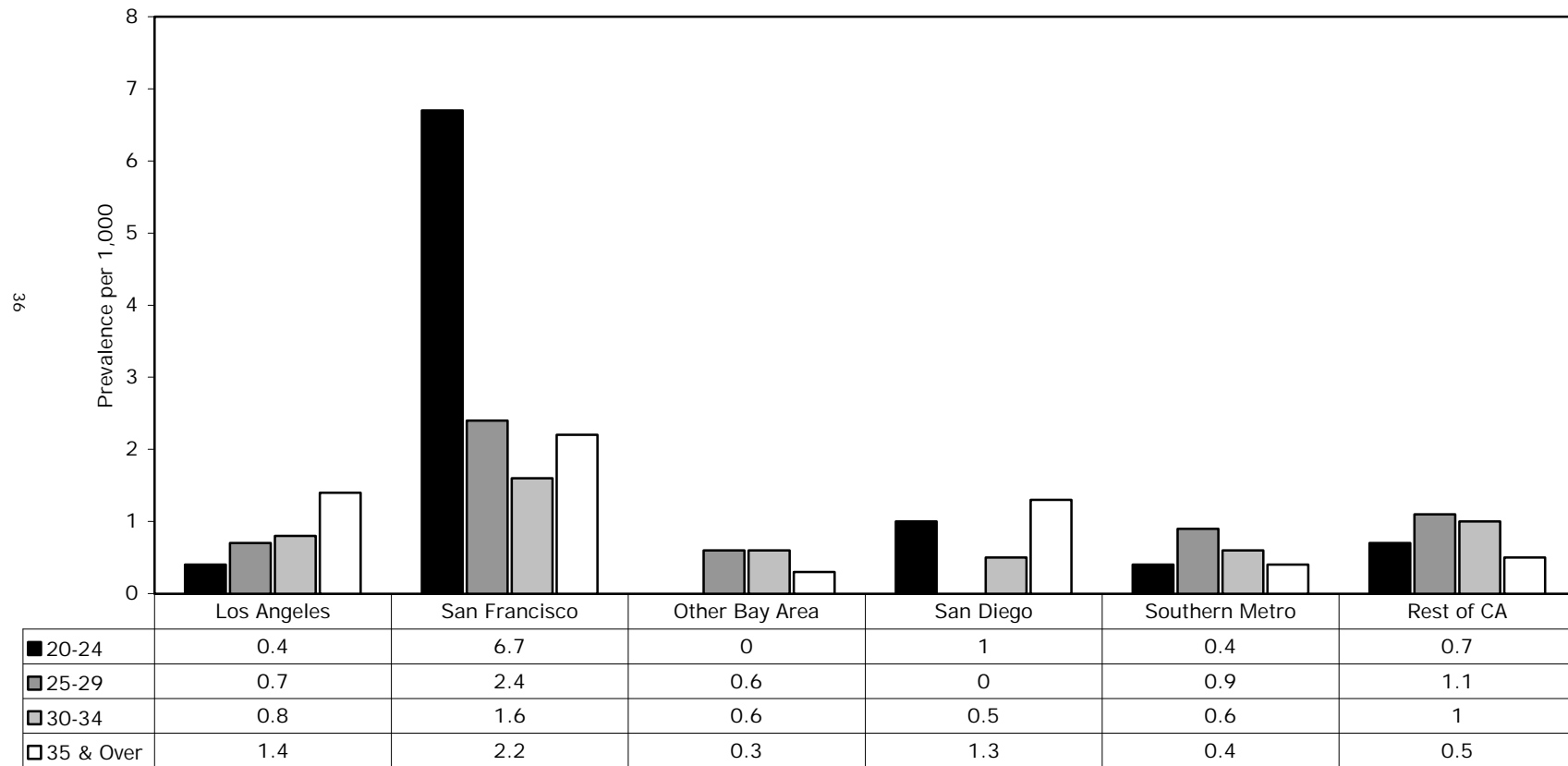
^a Not calculated for fewer than 100 tested.

**FIGURE 5. HIV SEROPREVALENCE IN CALIFORNIA
CHILDBEARING WOMEN, BY REGIONS AND RACE/ETHNICITY
1998**



Note: The "Other" category includes Native Americans, Pacific Islanders and mixed races. Excludes Asian and unknown race/ethnicity. Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

**FIGURE 6. HIV SEROPREVALENCE IN CALIFORNIA
CHILDBEARING WOMEN, BY REGION AND AGE GROUP
1998**



Note: Excludes Under 20 and unknown age groups. Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

**TABLE 6. HIV SEROPREVALENCE
IN CALIFORNIA CHILDBEARING WOMEN¹
BY URBAN/NON-URBAN REGIONS, RACE/ETHNICITY AND AGE GROUP
1992 – 1995 – 1998**

Urban/ Non-Urban Regions	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Urban ³	White	36,350	15	0.4	29,615	14	0.5	24,569	12	0.5
	Black	8,767	41	4.7	7,148	22	3.1	6,055	20	3.3
	Hispanic	53,339	24	0.4	50,121	38	0.8	43,901	15	0.3
	Asian	7,991	1	0.1	7,864	0	0.0	6,728	0	0.0
	Other	4,403	3	0.7	4,477	2	0.4	4,551	3	0.7
	Unknown	794	2	2.5	26	0	a	75	0	0.0
	Under 20	12,259	8	0.7	11,279	3	0.3	8,785	0	0.0
	20-24	27,289	25	0.9	22,846	23	1.0	18,937	11	0.6
	25-29	31,593	26	0.8	26,751	23	0.9	23,219	14	0.6
	30-34	25,287	17	0.7	24,147	17	0.7	20,990	13	0.6
	35 & Over	13,614	6	0.4	14,198	10	0.7	13,931	12	0.9
	Unknown	1,602	4	2.5	30	0	a	17	0	0.0
	Total	111,644	86	0.8	99,251	76	0.8	85,879	50	0.6

TABLE 6. (Continued)

Urban/ Non-Urban Regions	Race/Ethnicity Age Group	Total Tested	1992 Number HIV+ ²	Prevalence per 1,000	Total Tested	1995 Number HIV+ ²	Prevalence per 1,000	Total Tested	1998 Number HIV+ ²	Prevalence per 1,000
Non- Urban ⁴	White	17,183	3	0.2	14,820	3	0.2	12,423	4	0.3
	Black	1,843	6	3.3	1,630	3	1.8	1,478	9	6.1
	Hispanic	17,040	6	0.4	17,449	6	0.3	16,869	12	0.7
	Asian	1,706	0	0.0	1,452	0	0.0	1,053	0	0.0
	Other	1,309	0	0.0	1,368	0	0.0	1,406	2	1.4
	Unknown	308	0	0.0	21	0	a	0	0	a
	Under 20	5,469	1	0.2	5,765	2	0.3	4,968	0	0.0
	20-24	10,891	5	0.5	9,720	4	0.4	8,959	5	0.6
	25-29	10,917	6	0.5	9,602	3	0.3	8,818	11	1.2
	30-34	7,579	3	0.4	7,470	3	0.4	6,512	8	1.2
	35 & Over	3,936	0	0.0	4,157	0	0.0	3,970	3	0.8
	Unknown	597	0	0.0	26	0	a	2	0	0.0
	Total	39,389	15	0.4	36,740	12	0.3	33,229	27	0.8

¹Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

²All positive specimens were tested for HIV antibody by enzyme immunoassay and confirmed by Western blot.

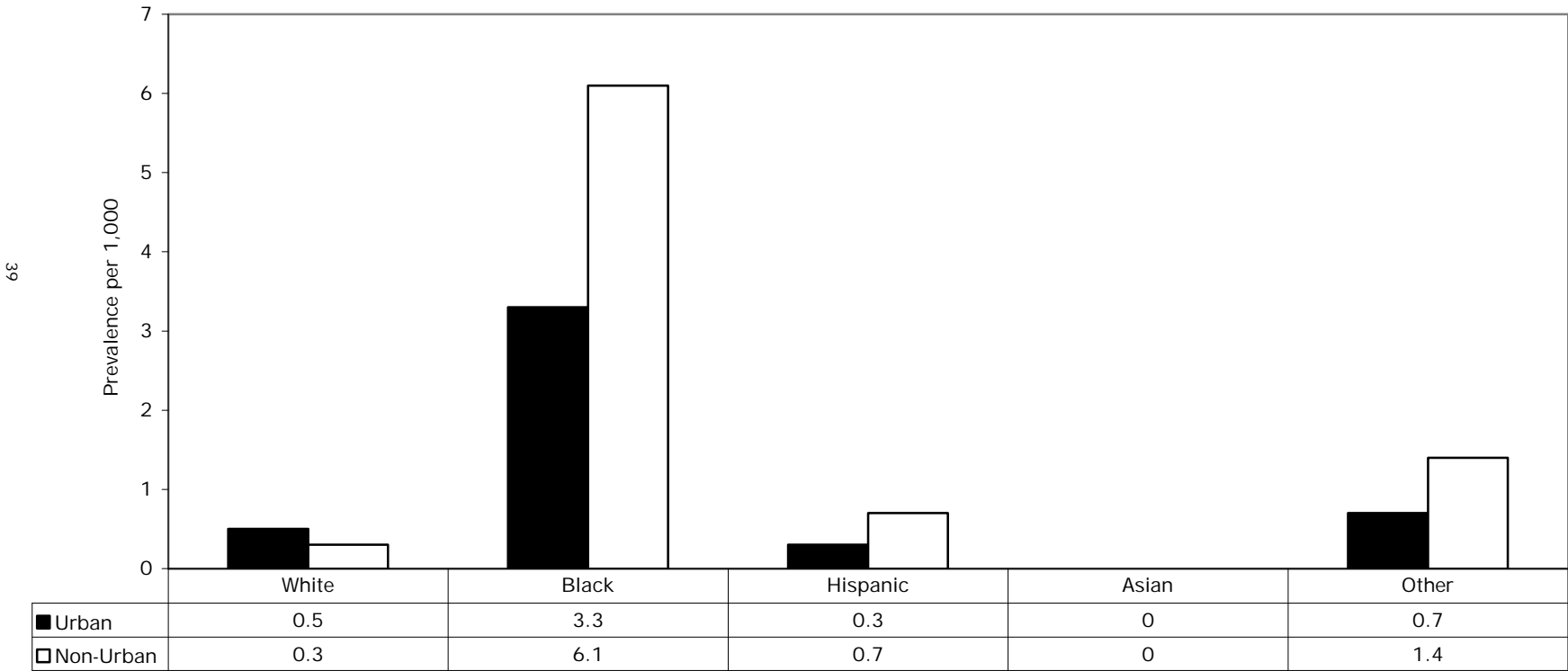
³Alameda, Contra Costa, Los Angeles, Marin, Orange, Riverside, Sacramento, San Diego, San Francisco, San Mateo, Santa Clara, and Ventura counties.

⁴Remaining counties.

⁵Includes Native Americans, Pacific Islanders and mixed races.

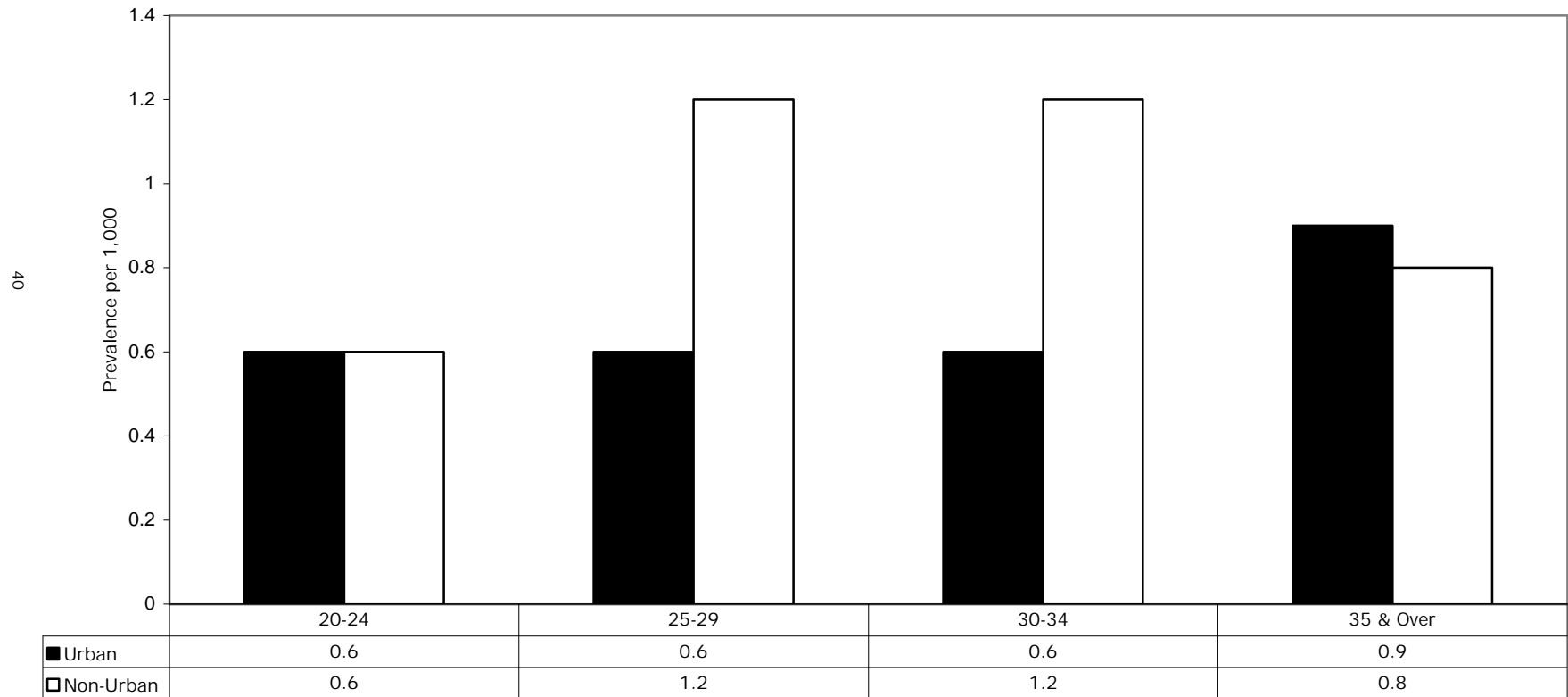
^aNot calculated for fewer than 100 tested.

FIGURE 7. HIV SEROPREVALENCE IN CALIFORNIA CHILDBEARING WOMEN, BY URBAN/NON-URBAN REGIONS AND RACE/ETHNICITY 1998



Note: The "Other" category includes Native Americans, Pacific Islanders and mixed races. Excludes unknown race/ethnicity. Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.

**FIGURE 8. HIV SEROPREVALENCE IN CALIFORNIA CHILDBEARING
WOMEN BY URBAN/NON-URBAN REGIONS AND AGE GROUP
1998**



Note: Excludes Under 20 and unknown age groups. Residual dried-blood specimens collected by heel stick onto filter paper for newborn metabolic screening were tested for HIV antibody only in the third quarter of each year.